

IN THE SPECIFICATION:

Paragraph beginning at line 9 of page 6 has been amended as follows:

~~Fig. 2 shows~~ Figs. 2A-2C show an original drawing, an image of a prototype, and a finished product, respectively, illustrating the invention.

Paragraph beginning at line 11 of page 6 has been amended as follows:

~~Fig. 3 illustrates~~ Figs. 3A-3B illustrate one phenomenon occurring in implementing the present invention and steps taken.

Paragraph beginning at line 13 of page 6 has been amended as follows:

~~Fig. 4 illustrates~~ Figs. 4A-4B illustrate another phenomenon occurring in implementing the present invention and steps taken.

Heading at line 4 of page 7 has been amended as follows:

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

Paragraph beginning at line 5 of page 7 has been amended as follows:

Fig. 1 is a fundamental conceptual view of the present invention. First, it is necessary to gain data about the three-dimensional shape of a model of a microstructure to be fabricated. In this case, if there is already a reference structure, an image of this structure can be used as a model. Generally, however, designed values of the shape dimensions of the structure to be fabricated are used. For example, CAD data as shown in Fig. 1 is used. Then, a processing method implemented to fabricate the structure (original drawing in Fig. 1) having those dimensions is determined. That is, a choice is made from sputter etching, gas-assisted etching, a deposition process (hereinafter simply referred to as CVD) where a source gas is ejected while being irradiated with a focused charged-particle beam. In the following description, it is assumed that a microstructure is fabricated by CVD. Information about a number of two-dimensional cross-sectional shapes (bitmaps in the figure) that are cross-sectional shapes of quite small thickness taken by cutting the model along planes perpendicular to the axis of the charged-particle beam is calculated from the aforementioned CAD data. If these quite thin cross-sectional slices are successively stacked, a structure having the shape of the model is created. Processing data (i.e., selection of the source gas, the

accelerating voltage of the focused charged-particle beam, beam current, scan rate, dot-to-dot interval, and dot duration or dot wait time (time until shifting to the next dot)) necessary to create these individual cross-sectional slices are set. The irradiation position is controlled based on the information about the two-dimensional shapes, using the processing data that is set in this way, and a provisional processing work is carried out. As a result, images of the prototype are taken from different angles and its three-dimensional shape is measured. Where a focused ion beam (FIB) system equipped with a scanning electron microscope is used, electron microscope images are gained as the images described above. Where the used system is not fitted with the microscope, ion microscope images are gained as the images described above. In this stage, the prototype is compared with the model in terms of dimensions, and differential data is obtained. The cause of the differences is searched and analyzed from the differential data. A correction is made to the processing data necessary to correct the differences, and a setup is again performed. Under this condition, an on-provisional processing work is carried out. The fundamental concept of the inventive idea has been described so far. Where sufficient modification is not yet made and there remain great dimensional differences after the non-provisional

processing work, the processing data may be again modified. A setup may be performed once more, and a non-provisional processing work may be carried out.